

WHAT IS CLAIMED IS:

1. 1. A system for sealing electrical conduits and conductors, the system comprising:
 2. a chamber configured for attachment to a conduit through which at least one conductor runs such that the at least one conductor also runs through the chamber;
 3. a port that permits access to the chamber to inject a sealing compound into the chamber; and
 4. a vent that permits access to a portion of the conductor located between portions of the conductor that are surrounded by the sealing compound after the sealing compound is injected into the chamber.
1. 2. The system of claim 1 wherein a pressure gauge that monitors the pressure within the chamber is attached to the vent.
1. 3. The system of claim 1 wherein a pressure gauge that monitors the pressure within the chamber is placed inside the vent.
1. 4. The system of claim 1 wherein the vent is blocked with a plug.
2. 5. The system of claim 1 wherein an explosion-proof drain that vents vapors from within the chamber is attached to the vent.
1. 6. The system of claim 1 wherein the chamber includes a base and a cover that is threaded to screw onto the base.
1. 7. The system of claim 6 wherein the port is located in the cover.
1. 8. The system of claim 1 wherein the vent includes a tube that separates the portions of the conductor that are surrounded by sealing compound from the portion of the conductor accessible through the vent.
1. 9. The system of claim 8 wherein the at least one conductor runs perpendicularly across the tube.

- 1 10. The system of claim 8 wherein the tube includes two interlocking halves between which
- 2 the at least one conductor is placed.
- 1 11. The system of claim 8 wherein the tube is made of plastic.
- 1 12. The system of claim 1 wherein the sealing compound is a two-part mixture that expands
- 2 after mixing and injection into the chamber.
- 1 13. A method for sealing electrical conduits and conductors, the method comprising:
 - 2 attaching a chamber to a conduit to be sealed, the conduit including at least one
 - 3 conductor running through it;
 - 4 mounting a tube that opens to the outside of the chamber within the chamber;
 - 5 threading the at least one conductor though the chamber and through the tube;
 - 6 covering the chamber with a cover; and
 - 7 putting a sealing compound in the chamber.
- 1 14. The method of claim 13 further comprising placing a plug over an end of the tube on the
- 2 outside of the chamber.
- 1 15. The method of claim 13 further comprising attaching a pressure gauge to an end of the
- 2 tube on the outside of the chamber.
- 1 16. The method of claim 13 further comprising inserting a pressure gauge into the tube and
- 2 placing a plug over an end of the tube on the outside of the chamber.
- 1 17. The method of claim 13 wherein the sealing compound fills the chamber and forms an
- 2 explosion-proof seal in the chamber.
- 1 18. The method of claim 13 wherein mounting the tube in the chamber comprises:
 - 2 mounting a bottom half of the tube in the chamber;
 - 3 passing the at least one conductor across the bottom half of the tube; and

4 mounting a top half of the tube in the chamber over the at least one conductor and the
5 bottom half of the tube.

6 19. The method of claim 13 wherein covering the chamber with the cover comprises
7 screwing the cover onto the chamber.

1 20. The method of claim 13 wherein putting the sealing compound in the chamber comprises
2 injecting the sealing compound into the chamber through a nozzle in the cover;
3 placing a plug over the nozzle; and
4 allowing the sealing compound to expand and harden.